

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

November 8, 2012

<u>Via E-mail</u>
Mr. Ori Shilo
Deputy Chief Executive Officer Finance and Operations
RedHill Biopharma Ltd.
21 Ha'arba'a Street
Tel Aviv 64739, Israel

Re: RedHill Biopharma Ltd

Amendment No. 1 to Draft Registration Statement on Form 20-F

Submitted October 26, 2012

CIK No. 0001553846

Dear Mr. Shilo:

We have reviewed your amended draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Amendment No. 1 to Draft Registration Statement on Form 20-F

Item 4. Information on the Company, page 26

B. Business Overview, page 26

Acquisition and License Agreements, page 38

1. Please refer to prior comment 23. Please revise your disclosure on page 55 to remove the implication that clinical development for RHB-102 and RHB -103 had been successfully completed by June 30, 2012. Also, add the expenses for clinical trials and research and development for the six months ended June 30, 2012 to the tables on page 59, consistent with the information in your response. Also, you indicate the clinical development costs for RHB-103 were \$0.2 million in 2011 and \$0.1 million in 2010. However, the table on page 59 appears to omit the costs for 2010. Please revise accordingly.

Mr. Ori Shilo RedHill Biopharma Ltd. November 8, 2012 Page 2

License Agreement for MAP diagnostic test related to RHB-104, page 41

2. Please refer to your response to Comment 22. Please expand your description of the license agreement governing RHB-104 to indicate that RedHill is entitled to terminate the agreement at any time. It appears that Article X, Section B of the license agreement allows Redhill to terminate the agreement with 90 days' notice.

<u>Item 5. Operating and Financial Review and Prospects</u> F. Tabular Disclosure of Contractual Obligations, page 61

3. With regard to prior comment 29 clarify in the disclosure if the milestone payments are contingent. If the milestone payments are not contingent the amounts due under your manufacturing agreements should be included in the table of contractual obligations. Estimates of when contractually due amounts will be paid can be made for purposes of preparing the table. Also, disaggregate obligations into less than 1 year, 1-3 years, 3-5 years and more than 5 years as specified in Item 5F of Form 20-F.

In addition, the table should include the \$8 million and \$4 million related to the clinical services agreement for RHB-104 disclosed on page 44.

<u>Item 6. Directors, Senior Management and Employees, page 62</u> B. Compensation, page 64

4. Please refer to your response to Comment 30 and your discussion of employment agreements beginning on page 66. The employment agreements for Messrs. Ben-Asher, Shilo, and Raday, and the consultancy services agreement with Dr. Fathi do not appear to fall within the exception from filing of Instruction 4(c)(iv) to the Exhibits of Form 20-F. Notably, these agreements are not available by its terms to employees generally, but contain payment terms specific to each named individual. In addition, these agreements must be filed pursuant to Instruction 4(c) to the Exhibits of Form 20-F regardless of whether the public filing of these agreements is required in your home country. Please file these agreements accordingly.

Item 18. Financial Statements

Note 2-Summary of Significant Accounting Policies, page F-16

5. With regard to prior comments 42 and 43, illustrate for us how recognition upon completion of development milestones results in recognizing research and development expense as incurred. Clarify if "milestones" are just an event which triggers a payment under the contract.

Mr. Ori Shilo RedHill Biopharma Ltd. November 8, 2012 Page 3

Note 12-Mandatory Convertible Loans and Royalty Obligation to Investors, page F-32

6. Please refer to prior comment 44. Please explain to us your basis for concluding that the \$391,000 value of the royalty obligation approximated its fair value in August 2010. Also, explain to us how you determined the 27.98% effective interest rate and how this rate resulted in accretion of \$327,000 in 2010 and \$168,000 in 2011.

Note 21-Loss Per Ordinary Share, page F-45

7. Please refer to prior comment 47. Your disclosure appears to indicate that basic and diluted earnings per share was calculated based on the weighted average of ordinary shares issued in the period instead of the weighted average number of ordinary shares outstanding during the period, as stipulated in IAS 33. Please revise your presentation of basic and diluted earnings per share for each period presented to be in accordance with IAS 33. Also, your response indicates that your initial share capital of \$3 million was determined by multiplying 960,000 ordinary shares issued in 2009 by the par value per share (NIS 0.01) and then dividing the result by the exchange rate of the New Israeli Shekel to the US dollar at date of issuance. Please provide us the exchange rate used in this calculation. Also, explain why you used 960,000 ordinary shares when your disclosure in on page F-45 indicates that 8.9 million ordinary shares were issued in 2009.

General

If you intend to respond to these comments with an amended draft registration statement, please submit it and any associated correspondence in accordance with the guidance we provide in the Division's October 11, 2012 announcement on the SEC website at http://www.sec.gov/divisions/corpfin/cfannouncements/drsfilingprocedures101512.htm.

You may contact Frank Wyman at (202) 551-3660 or Lisa Vanjoske at (202) 551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Rose Zukin at (202) 551-3239 or me at (202) 551-3710 with any other questions.

Sincerely,

/s/ Jeffrey P. Riedler

Jeffrey P. Riedler Assistant Director Mr. Ori Shilo RedHill Biopharma Ltd. November 8, 2012 Page 4

cc: Rick Werner. Esq.

Haynes and Boone, LLP

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